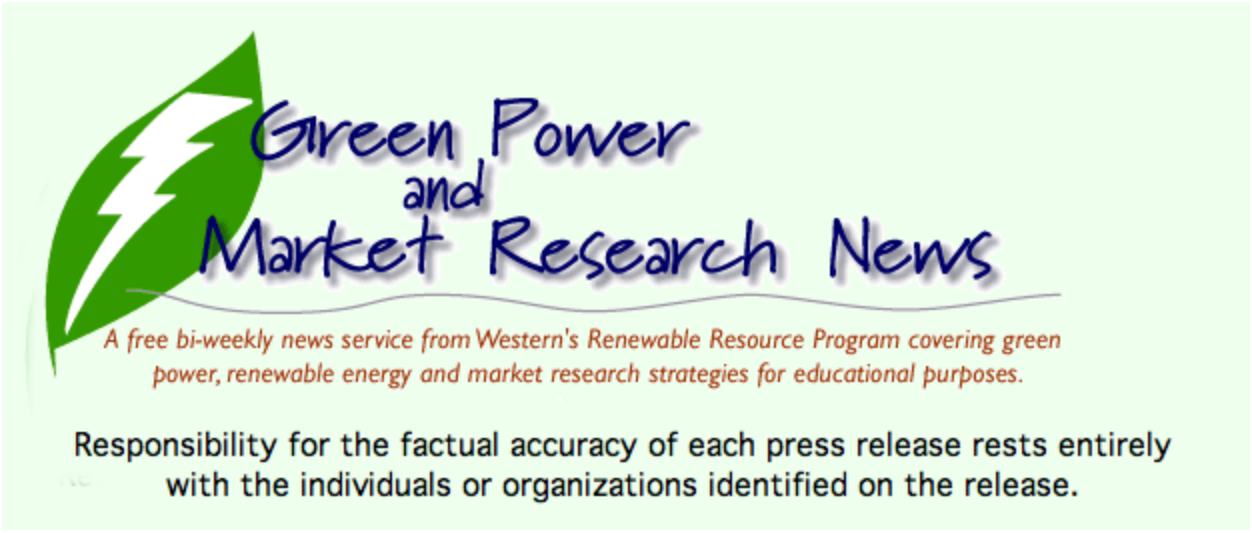

Green Power

Solar Renewable Energy Certificates (SRECs)

At the core of SRECTrade's service is a turnkey solution for managing the creation and sale of the SRECs produced by solar facilities. SRECTrade also provides innovative solutions to help businesses, individuals, installation firms and investors make the leap towards a solar future.

SRECTrade currently operates monthly auctions for SRECs in states where there are SREC markets. Read more. *Source: Public Renewables Partnership, 1/12/12*

Report looks at status and trends in solar REC markets

A paper published by the National Renewable Energy Laboratory examines experience in solar renewable energy certificate (SREC) markets in the United States. It describes how SREC markets function—key policy design provisions, eligible technologies, state and regional eligibility rules, solar alternative compliance payments, measurement and verification methods, long-term contracting provisions, and rate caps. It also examines the trends of SREC markets—trading volumes, sourcing trends, trends in the size of solar photovoltaic (PV) systems driven by these markets, and trends in price and compliance. Read more. *Source: DOE Office of Energy Efficiency and Renewable Energy, 1/12/12*

Renewable Energy Certificates (RECs)

REC Prices

In general, REC prices depend on a number of factors, including the technology, the vintage (year in which it was generated), the volume purchased, the region in which the generator is located, whether they are eligible for certification, and whether the RECs are bought to meet compliance obligations or serve voluntary retail consumers. Natural gas prices can also affect the cost competitiveness of renewable energy generation, which is reflected in REC prices. Read more. *Source: DOE Office of Energy Efficiency and Renewable Energy, 1/12/12*

Take the 5-Year Renewable Energy Pledge

The 5 year pledge shows renewable energy developers and investors that there is strong, long-term demand for renewable energy among organizations that are not subject to policy mandates. These commitments from customers in the voluntary market help alleviate risk and provide certainty associated with renewable energy project development. Read more. *Source: Renewable Energy Markets Association, 1/11/12*

Volkswagen to spend $1.4b on green power

VW is planning to spend $1.4 billion on renewable energy infrastructure.

The plan by Europe's biggest carmaker includes wind farms and hydroelectric dams to help minimise its carbon dioxide emissions and trim the amount of energy required to produce each vehicle.

The investment comes as part of Volkswagen's push to reduce the environmental impact of its factories by 25 per cent by 2018 - the same year it aims to overtake Toyota as the world's biggest car producer. It will also give VW a supply of "zero-emission" energy for its fleet of electric vehicles due to go on sale next year. Read more. *Source: Cars Guide, 1/7/12*

Green-e Reports 23% Increase in Certified Green Power Sales

Center for Resource Solutions released its 2010 Green-e Verification Report, which highlights Green-e Energy Certified renewable energy and carbon offset sales in 2010. The report also highlights organizations participating in Green-e Marketplace, which allows participating organizations to use the Green-e logo. The Green-e Verification Report shows a 23 percent increase in total Green-e Energy retail sales in 2010, equivalent to more than 23 million megawatt-hours (MWh) of renewable energy generation. More than 393,000 MWh were purchased or generated by companies participating in Green-e Marketplace. Green-e Energy certified 65 percent of all retail sales in the voluntary market in 2010. Read more. *Source: DOE Green Power Network, 1/5/12*

San Francisco (CA) PUC Approves Green Power Program

The San Francisco Public Utilities Commission (SFPUC) approved the CleanPowerSF community choice program, which is expected to begin as early as July 2012. Community choice aggregation is a state policy that enables local governments to aggregate electricity demand within their jurisdictions in order to procure alternative energy supplies while maintaining the existing electricity provider for transmission and distribution services. Read more. *Source: DOE Office of Energy Efficiency and Renewable Energy State Monthly News Update, 1/5/12*

Visit U.S. DOE EERE Green Power Network for more information.

Renewable Energy Technologies

GE Courts Turbine Customers for Solar Panels Before Wind 'Crash'

General Electric Co. is trying to convince developers that have bought its wind turbines to double down on clean energy by purchasing its solar panels as well, said Vic Abate, who runs the company's renewables unit.

Invenergy LLC is planning to install 23 megawatts of GE's thin-film solar panels at a site adjacent to a 210-megawatt wind farm it operates in Illinois with GE turbines. Read more. *Source: Businessweek, 1/23/12*

Vestas Jobs Threat Pressures Obama to Extend Tax Break

Vestas Wind Systems A/S's threat to fire 1,600 workers in the U.S. undermines President Barack Obama's goal of creating green jobs and adds to pressure on Congress to extend a tax credit that the industry relies on.

The world's biggest maker of wind turbines said yesterday it will probably reduce its staff beyond the 2,335 posts it's eliminating worldwide if the U.S. doesn't renew the so-called Production Tax Credit, which expires at the end of this year. Read more. *Source: Bloomberg, 1/13/12*

Atlas Maps U.S. Renewable Energy Resources

A new geospatial application allows users to easily and accurately map potential renewable energy resources in the United States: wind energy, geothermal energy, concentrating solar power and photovoltaic solar energy.

A new geospatial application developed by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) allows users to easily and accurately map potential renewable energy resources in the United States. Read more. *Source: REVE, 1/17/12*

Volcano power may boost green energy

Geothermal energy developers plan to pump 91 million litres of water into the side of a dormant volcano in Oregon to demonstrate new technology they hope will give a boost to a green energy sector that has yet to live up to its promise.

They hope the water comes back to the surface fast enough and hot enough to create cheap, clean electricity that isn't dependent on sunny skies or stiff breezes - without shaking the earth and rattling the nerves of nearby residents. Read more. *Source: News24, 1/15/12*

CPUC Approves PPA for Pattern's Ocotillo Wind Project

Ocotillo Wind Energy Facility to Begin Generating Renewable Energy by End of 2012, Utilizing Sunrise Powerlink

Pattern Energy Group LP (Pattern) today announced that the California Public Utilities Commission (CPUC) has approved a 20-year power purchase agreement (PPA) with San Diego Gas & Electric (SDG&E) for 315 megawatts (MW) of wind energy to be generated at its Ocotillo Wind Energy Facility in Southern California. The project will produce enough clean and renewable wind energy to serve more than 130,000 households a year.

"We appreciate the strong support we have received across a broad spectrum of interests for this project, which will create 300 immediate construction jobs in a community with the highest unemployment rate in the nation," said Mike Garland, chief executive officer of Pattern Energy. "Pattern is proud to implement cutting-edge measures for avoiding impacts on cultural and environmental resources. We will continue to work closely with the community and Native Americans, as well as environmentalists and local agencies to ensure the region's cultural heritage and environmental resources alike are preserved and protected." Read more. *Source: Pattern Energy, 1/12/12*

SRP, ASU Partner on 1-Megawatt Solar Power Plant

First Commercial SunPower C7 Tracker Installation

Salt River Project (SRP), Arizona State University and SunPower Corp. today announced an agreement to build a 1-megawatt solar photovoltaic power plant at ASU's Polytechnic campus in Mesa, Ariz. The 1-megawatt facility will be the first commercial deployment of SunPower® C7 Tracker technology, a solar photovoltaic tracking system that concentrates the sun's power seven times designed to achieve the lowest levelized cost of electricity for solar power plants available today. Read more. *Source: SRP, 1/11/12*

Getting Renewables on the Grid, Part 4: Why PV and the Grid Need CSP

Falling panel costs make PV appealing, mandates demand solar on the grid—CSP can make both easier.

Concentrating solar power (CSP) technologies that use mirrors instead of photovoltaic (PV) panels are challenging to finance. CSP is a newer technology that is just starting to bring down costs through economies of scale and improved efficiencies.

But there is a compelling rationale for concentrating technologies. PV doesn't entirely answer the needs of the transmission system, while CSP with thermal energy storage (TES) can. Read more. *Source: GreenTech Media, 1/3/12*

Learn more about renewable resources.

Outreach, Education, Reports & Studies

Energy self-sufficiency the topic of tribal webinar series

The Department of Energy's (DOE) Office of Indian Energy Policy and Programs, DOE's Tribal Energy Program and Western Area Power Administration are conducting a series of webinars to promote tribal energy sufficiency and foster economic development and employment on tribal lands through renewable energy and energy-efficiency technologies. The webinars will:

- Discuss methods for tribes to evaluate and develop their renewable energy resources,
- Help them build the knowledge and skills essential for sustainable energy projects,
- Outline a process of strategic energy planning for tribes interested in improving their energy security, sovereignty and local economy,
- Provide renewable energy and energy-efficiency information for tribal decision makers, and
- Offer ways for tribes and utilities to partner in renewable energy and energy-efficiency development.

The webinar series began in August 2011 and will continue through September 2012. Read more. *Source: DOE Tribal Energy Program, 1/19/11*

Ecotricity goes offshore to harness potential of wave power

Green energy company Ecotricity has announced it is to extend its wind and solar portfolio by adding the power of the sea to make green electricity.

The Stroud-based business will today announce it is developing a radical wave power device called Searaser – which it claims can address two of the biggest barriers to the deployment of renewable energy on the scale that Britain needs – cost and variable output.

Searaser is the brainchild of Devon engineer Alvin Smith and it harnesses the power of ocean swells to create electricity, Ecotricity says it hopes to install 200 of the devices within the next five years. Read more. *Source: ClickGreen, 1/22/12*

DOE Reports Show Major Potential for Wave and Tidal Energy Production Near U.S. Coasts

The U.S. Department of Energy (DOE) today released two nationwide resource assessments showing that waves and tidal currents off the nation's coasts could contribute significantly to the United States' total annual electricity production, further diversify the nation's energy portfolio, and provide clean, renewable energy to coastal cities and communities. These new wave and tidal resource assessments, combined with ongoing analyses of the technologies and other resource assessments, show that water power, including conventional hydropower and wave, tidal, and other water power resources, can potentially provide 15% of our nation's electricity by 2030. Today's reports represent the most rigorous analysis undertaken to date to accurately define the magnitude and location of America's ocean energy resources. The information in these resource assessments can help to further develop the country's significant ocean energy resources, create new industries and new jobs in America, and secure U.S. leadership in an emerging global market. Read more. *Source: DOE Office of Energy Efficiency and Renewable Energy, 1/18/12*

US Replaces China as Top Clean Energy Investor

The United States has regained its place as the world’s number one investor in clean energy, reclaiming the top spot from China, according to Bloomberg New Energy Finance.

In 2011, U.S. total investment in clean energy surged to $55.9 billion, up 33 percent from 2010; China saw investment rise just 1 percent to $47.4 billion over the same time period. This is the first time that the U.S.—and not China—has held the number one spot since 2008.

Bloomberg attributes the increase in U.S.investment in large part to support initiatives such as the federal loan guarantee program and a Treasury grant program which have now expired. Read more. *Source: Environmental Leader, 1/17/12*

Are 'green energy' policies thwarting job growth? No: Route to profitable public investment

The Obama administration's investments in the green energy economy have already produced a great number of jobs in a sector with significant potential for additional growth. It would be a serious mistake to undercut the initiative just as it's contributing to the recovery.

While estimates vary on exactly how many jobs the American Recovery and Reinvestment Act created, several experts have put the number at 2 million or more. Separate studies by Daniel J. Wilson of the Federal Reserve Bank of San Francisco, economists James Feyrer and Bruce Sacerdote of Dartmouth College and the Congressional Budget Office also conclude that government spending on infrastructure, goods and services produces one of the highest jobs-per-dollar ratios of all spending alternatives. Read more. *Source: Sacramento Bee, 1/14/12*

DOE Announces Tools To Help Deploy Distributed Energy

The U.S. Department of Energy (DOE) has announced two new online tools to assist state and local policymakers, consumers and stakeholders in evaluating siting and policy issues to help accelerate the use of distributed wind energy systems.

The DOE's Office of Energy Efficiency and Renewable Energy funded the development of the Distributed Wind Site Analysis Tool and Distributed Wind Policy Comparison Tool through American Recovery and Reinvestment Act grants. The tools are designed to help more people across the country install wind turbines. Read more. *Source: Renew Grid, 1/13/12*

DOE Announces New Online Tools to Help Deploy Distributed Wind Energy Systems

The Department of Energy (DOE) today announced two new online tools to assist state and local policymakers, consumers, and stakeholders in evaluating siting and policy issues to help accelerate the use of distributed wind energy systems – such as wind turbines installed at a homes and businesses. DOE's Office of Energy Efficiency and Renewable Energy funded development of the "Distributed Wind Site Analysis Tool" and "Distributed Wind Policy Comparison Tool" through American Recovery and Reinvestment Act grants. The tools are designed to help more people across the country install wind turbines to produce clean, renewable energy.

Distributed wind energy systems are typically installed near the point of electricity use at residences, businesses, and community institutions such as schools and hospitals to help save energy, reduce energy bills, and cut carbon emissions. The two online tools announced today will lower barriers to distributed wind energy deployment, identified in DOE's 2008 report, 20% Wind Energy by 2030. The report identifies site-specific factors such as zoning and permitting costs, interconnection fees, shipping, and other related costs as significant factors in the costs of distributed wind systems. Such costs can limit distributed system deployment even in wind-rich locations. Read more. *Source: DOE Office of Energy Efficiency and Renewable Energy. 1/12/12*

Electronic Atlas Maps U.S. Renewable Energy Resources

A new geospatial application developed by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) allows users to easily and accurately map potential renewable energy resources in the United States.

The interactive tool, RE Atlas, is free to use and available online.

"Ease of use and breadth of data make RE Atlas an excellent tool for policymakers, planners, energy developers, and others who need to better understand the renewable resources available in the United States," said Dan Getman, whose team in NREL's Strategic Energy Analysis Center developed the tool. "RE Atlas is an important addition to NREL's suite of geospatial tools, because it brings together so many renewable energy datasets in one easy-to-use tool."

RE Atlas is designed to facilitate energy policy development, investment, and education by making high quality data accessible and easy to understand. The tool creates dynamic maps of renewable resources, including biomass, geothermal, hydropower, solar, and wind. RE Atlas can display resources individually or in a composite fashion.

NREL is the U.S. Department of Energy's primary national laboratory for renewable energy and energy efficiency research and development. NREL is operated for DOE by the Alliance for Sustainable Energy, LLC. *Source: National Renewable Energy Laboratory, 1/6/12*

Renewable Energy Project Finance Analysis at NREL for December 2011

Happy Holidays from the Finance Team at the National Renewable Energy Laboratory (NREL)! Check out our most recent analysis below.

Innovative State Solar PV Financing Combines Bond and PPA

Historically, state and local governmental agencies have employed one of two models to deploy solar photovoltaic (PV) projects: (1) self-ownership (financed through a variety of means) or (2) third-party ownership through a power purchase agreement (PPA). Administrators in New Jersey recently pioneered a way to combine many of the benefits of self-ownership and third-party PPAs through a bond-PPA hybrid (sometimes referred to as the Morris Model).

This NEW fact sheet:

- Describes how the hybrid model works
- Assesses the model's relative advantages and challenges as compared to self-ownership and the third-party PPA model
- Provides a quick guide to project implementation

- Assesses the replicability of the model in other jurisdictions across the United States.

Market Insights Analysis

- *NEW SREC Market Report*
  A new NREL report and an upcoming FREE WEBINAR discuss key policy issues in solar renewable energy certificate markets. More.
- *Geothermal Resource Leases*
  What can Bureau of Land Management geothermal lease prices tell us about market development? More.
- *Cost of Utility-Scale Solar*
  Read about why projects with the lowest levelized cost of energy may not have the lowest installed cost. More.
- *Ex-Im Bank Supports Clean Energy*
  Learn about renewable energy and energy efficient financial support from the U.S. Export-Import Bank. More.

Source: National Renewable Energy Laboratory, 12/30/11

California issues final report on 'gree' job training

The California Energy Commission is developing guidelines for the Clean Energy Partnership Academies as required by the Clean Technology and Renewable Energy Job Training, Career Technical Education, and Dropout Prevention Program. The partnership academies will prepare high school students in grades 9-12 for the high-wage jobs created by California□s advancement of renewable energy, energy and water efficiency and conservation, integrated water management, clean technology, climate change, and energy security policies. Read more. *Source: California Energy Commission, 1/5/12*

Program fills need for trained solar professionals

The Solar Instructor Training Network of nine Regional Training Providers is addressing a critical need for high-quality, local, and accessible training in solar system design, installation, sales, and inspection. The SITN is a five-year effort intended to create a geographic blanket of training opportunities in solar installation across the United States.

The regional resource and training providers offer resources to select educational institutions in their regions. Resources include train-the-trainer workshops and, in many cases, training equipment and tools for instructors. Read more. *Source: Interstate Renewable Energy council, 1/3/12*

Learn more about education and outreach activities.

News from Washington

Greenhouse Gas Reporting Program Data for Calendar Year 2010

On January 11, 2012, EPA released greenhouse gas (GHG) data reported from large facilities and suppliers across the U.S. economy for the year 2010.

The 2010 GHG data includes public information from facilities in 9 industry groups, including 29 source categories, which directly emit large quantities of GHGs, as well as suppliers of certain fossil fuels and industrial gases. Read more. *Source: U.S. Environmental Protections Agency, 1/11/12*

Obama Drives Clean Energy Boom On Public Lands

There is nothing a president can do to force Congress to pass climate bills, but President Obama has advanced more renewable energy than any other, anyway. The executive branch does have jurisdiction over granting energy leases on 245 million acres of public lands through the cabinet level Department of the Interior's Bureau of Land Management (BLM) and Obama has made adroit use of this. Read more. *Source: Earth Techling, 1/10/12*

Learn more about national activities.

State Activities, Marketing & Market Research

China's Goldwind Expanding in U.S. as Rivals Cut Back

Xinjiang Goldwind Science & Technology Co., China's second-largest wind-turbine maker, indicated it's picking up market share in the U.S. as falling prices and expiring subsidies force rivals to pare back.

Goldwind bought two 10-megawatt wind farms in Montana to showcase its equipment and has taken orders in seven other U.S. states since it started sales in the region in June 2010, according to a company statement released yesterday. Read more. *Source: Bloomberg Businessweek, 1/20/12*

CPUC approves Ocotillo wind farm power sale

The controversial wind power project set for the Ocotillo area can sell its power to San Diego, though the facility isn't even under construction yet.

The California Public Utilities Commission approved a 20-year power purchase agreement between San Diego Gas & Electric and Pattern Energy Group LP for 315 megawatts of wind

energy to be generated at Pattern's proposed Ocotillo Wind Energy Facility. The project is set to produce enough power for more than 130,000 households a year, according to a press release from the company. Read more. *Source: Imperial Valley Press, 1/14/12*

California Regulators Add Teeth to Landmark Clean Energy Policy

EarthJustice issued the following news release:

The California Public Utilities Commission (CPUC) voted unanimously today to strengthen a key clean energy policy in California called the Loading Order. The Loading Order sets a priority list for electricity sources. California's utilities must first employ energy efficiency and conservation to meet customer demand; then energy from renewable sources such as wind, solar and geothermal. Only after all those supplies are exhausted may the utilities purchase power from fossil fuel plants. Read more. *Source: ElectroIQ 1/15/12*

Learn more about energy analysis.

Grants, RFPs & Other Funding News

EERE Postdoctoral Research Award: Accepting Geothermal Applications — Deadline: May 1, 2012

Impact

- Create the next generation of scientific leaders in energy efficiency and renewable energy.
- Attract the best scientists and engineers to pursue breakthrough technologies in a highly prestigious postdoctoral research program.

Opportunity

- Access to unique education and training opportunities, top scientists in their field, and state-of-the-art projects and equipment.
- Innovative technologies will be developed that will have a real impact on the economy by providing energy efficient and affordable technologies; in the environment by providing clean energy technologies; and in the quality of life for all Americans by enhancing their energy choices.

Details

- Research opportunities will be awarded to qualified applicants to work on collaborative applied research of mutual interest to the applicant, the host facility, and the EERE Program sponsoring the award.
- The award will provide an annual stipend, allowances for health insurance and research-related expenses, and limited reimbursement for relocation expenses.
- Annual Research Meeting for participants organized and hosted by EERE.
- The EERE Postdoctoral Research Awards are administered by the Oak Ridge Institute for Science and Education (ORISE) in collaboration with EERE. ORISE is responsible for the implementation of the program, processing applications, the review and notification processes, and management of payments to participants.

Read more. Learn more about the Geothermal Technologies Program. *Source: U.S. DOE Office of Energy Efficiency and Renewable Energy, 1/20/12*

Learn more about funding solicitations.

This news item comes to you as a service of Western's Renewable Resources Program.